APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,264	12/05/2001	Michael A. Siani-Rose	3407.2	1024

33494	7590	03/24/2006

TOWNSEND AND TOWNSEND AND CREW LLP
TWO EMBARCADERO CENTER
8TH FLOOR
SAN FRANCISCO, CA 94111-3834

EXAMINER
ALLEN, MARIANNE P

ART UNIT	PAPER NUMBER
1647	

DATE MAILED: 03/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.

EXAMINER

ART UNIT	PAPER

20060322

DATE MAILED:

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner for Patents

The reply filed on 1/13/2006 is not fully responsive to the prior Office Action because of the following omission(s) or matter(s): Errors were detected when processing the computer readable form submitted. See attached printout. See 37 CFR 1.111. Since the above-mentioned reply appears to be *bona fide*, applicant is given **ONE (1) MONTH or THIRTY (30) DAYS** from the mailing date of this notice, whichever is longer, within which to supply the omission or correction in order to avoid abandonment. EXTENSIONS OF THIS TIME PERIOD MAY BE GRANTED UNDER 37 CFR 1.136(a).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne P. Allen whose telephone number is 571-272-0712. The examiner can normally be reached on Monday-Thursday, 5:30 am - 1:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback, can be reached on 571-272-0961. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Marianne P. Allen
Primary Examiner
Art Unit: 1647

3/22/06

PTO-90C (Rev.04-03)

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING
   ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: _09/683,264_

Source: _1FW16,_

Date Processed by STIC: _1/18/06_

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.
PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:
1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY
FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO **REDUCE** ERRORED SEQUENCE LISTINGS, **PLEASE** USE THE **CHECKER VERSION 4.4.0 PROGRAM,** ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:
   http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.
Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.
Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio **(<http://www.uspto.gov/ebc/efs/downloads/documents.htm>** , **EFS Submission User Manual** - ePAVE)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):**
   U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED	SUGGESTED CORRECTION	SERIAL NUMBER: _09/683,264_

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

1 ____ Wrapped Nucleics
Wrapped Aminos

The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."

2 ____ Invalid Line Length

The rules require that a line not exceed 72 characters in length. This includes white spaces.

3 ____ Misaligned Amino
Numbering

The numbering under each 5th amino acid is misaligned. Do not use tab codes between numbers; use **space characters**, instead.

4 ____ Non-ASCII

The submitted file was not saved in ASCII(DOS) text, as **required** by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**

5 ____ Variable Length

Sequence(s) ____ contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.

6 ____ PatentIn 2.0
"bug"

A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**

7 ____ Skipped Sequences
(OLD RULES)

Sequence(s) ____ missing. If intentional, please insert the following lines for each skipped sequence:
(2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
(i)   SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
(xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
This sequence is intentionally skipped

Please also adjust the "(ii) NUMBER OF SEQUENCES:" response to include the skipped sequences.

8 ____ Skipped Sequences
(NEW RULES)

Sequence(s) ____ missing. **If intentional,** please insert the following lines for each skipped sequence.
<210> sequence id number
<400> sequence id number
000

9 ____ Use of n's or Xaa's
(NEW RULES)

Use of n's and/or Xaa's have been detected in the Sequence Listing.
Per 1.823 of Sequence Rules, use of <220>-<223> is MANDATORY if n's or Xaa's are present.
In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.

10 ____ Invalid <213>
Response

Per 1.823 of Sequence Rules, the only **valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence

11 ____ Use of <220>

Sequence(s) ____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is MANDATORY if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section.
(See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32)   (Sec. 1.823 of Sequence Rules)

12 ____ PatentIn 2.0
"bug"

Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.

13 ____ Misuse of n/Xaa

"n" can only represent a single <u>nucleotide</u>; "Xaa" can only represent a single <u>amino acid</u>
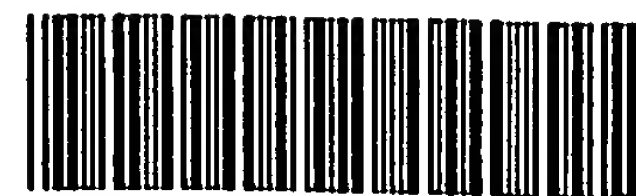
IFW16

RAW SEQUENCE LISTING   DATE: 01/18/2006
PATENT APPLICATION: US/09/683,264 TIME: 09:46:35

   Input Set : A:\018547.ST25.txt
   Output Set: N:\CRF4\01182006\I683264.raw

```
 3 <110> APPLICANT: Affymetrix, Inc.
 4        Siani-Rose, Michael A.
 5        Shigeta, Ron
 7 <120> TITLE OF INVENTION: Computer Software for Automated Annotation of Biological
 8        Sequences
10 <130> FILE REFERENCE: 018547-048820US
12 <140> CURRENT APPLICATION NUMBER: US 09/683,264
13 <141> CURRENT FILING DATE: 2001-12-05
15 <150> PRIOR APPLICATION NUMBER: US 60/285,144
16 <151> PRIOR FILING DATE: 2001-04-19
18 <150> PRIOR APPLICATION NUMBER: US 60/285,403
19 <151> PRIOR FILING DATE: 2001-04-20
21 <160> NUMBER OF SEQ ID NOS: 5
23 <170> SOFTWARE: PatentIn version 3.3
25 <210> SEQ ID NO: 1
26 <211> LENGTH: 373
27 <212> TYPE: PRT
28 <213> ORGANISM: Artificial
30 <220> FEATURE:
31 <223> OTHER INFORMATION: Figure GRAPAHIT1 sequence
33 <400> SEQUENCE: 1
35 Leu Leu Gln Asp Ser Leu Leu Arg Leu Lys Asp Tyr Arg Gln Cys Phe
36 1               5                   10                  15
39 Glu Cys Ser Asp Val Ala Leu Asn Glu Ala Val Gln Gln Met Val Asn
40              20                  25                  30
43 Ser Gly Glu Ala Ala Ala Lys Glu Glu Trp Val Ala Thr Val Thr Gln
44          35                  40                  45
47 Leu Leu Met Gly Ile Glu Gln Ala Leu Ser Ala Asp Ser Ser Gly Ser
48      50                  55                  60
51 Ile Leu Lys Val Ser Ser Ser Thr Thr Gly Leu Val Arg Leu Thr Asn
52 65                  70                  75                  80
55 Asn Leu Ile Gln Val Ile Asp Cys Ser Met Ala Val Gln Glu Glu Ala
56              85                  90                  95
59 Lys Glu Pro His Val Ser Ser Val Leu Pro Trp Ile Ile Leu His Arg
60              100                 105                 110
63 Ile Ile Trp Gln Glu Glu Asp Thr Phe His Ser Leu Cys His Gln Gln
64          115                 120                 125
67 Gln Leu Gln Asn Pro Ala Glu Glu Gly Met Ser Glu Thr Pro Met Leu
68      130                 135                 140
71 Pro Ser Ser Leu Met Leu Leu Asn Thr Ala His Glu Tyr Leu Gly Arg
72 145                 150                 155                 160
75 Arg Ser Trp Cys Cys Asn Ser Asp Gly Ala Leu Leu Arg Phe Tyr Val
76              165                 170                 175
```

RAW SEQUENCE LISTING   DATE: 01/18/2006
PATENT APPLICATION: US/09/683,264   TIME: 09:46:35

Input Set : A:\018547.ST25.txt
Output Set: N:\CRF4\01182006\I683264.raw

```
79  Arg Val Leu Gln Lys Glu Leu Ala Ala Ser Thr Ser Glu Asp Thr His
80          180         185             190
83  Pro Tyr Lys Glu Glu Leu Glu Thr Ala Leu Glu Gln Cys Phe Tyr Cys
84          195         200             205
87  Leu Tyr Ser Phe Pro Ser Lys Lys Ser Lys Ala Arg Tyr Leu Glu Glu
88      210         215             220
91  His Ser Ala Gln Gln Val Asp Leu Ile Trp Glu Asp Ala Leu Phe Met
92  225         230             235             240
95  Phe Glu Tyr Phe Lys Pro Lys Thr Leu Pro Glu Phe Asp Ser Tyr Lys
96              245         250             255
99  Thr Ser Thr Val Ser Ala Asp Leu Ala Asn Leu Leu Lys Arg Ile Ala
100             260         265             270
103 Thr Ile Val Pro Arg Thr Glu Arg Pro Ala Leu Ser Leu Asp Lys Val
104         275         280             285
107 Ser Ala Tyr Ile Glu Gly Thr Ser Thr Glu Val Pro Cys Leu Pro Glu
108     290         295             300
111 Gly Ala Asp Pro Ser Pro Val Val Asn Glu Leu Tyr Tyr Leu Leu
112 305             310             315                 320
115 Ala Asp Tyr His Phe Lys Asn Lys Glu Gln Ser Lys Ala Ile Lys Phe
116             325             330             335
119 Tyr Met His Asp Ile Cys Ile Cys Pro Asn Arg Phe Asp Ser Trp Ala
120             340             345             350
123 Gly Met Ala Leu Ala Arg Ala Ser Arg Ile Gln Asp Lys Leu Asn Ser
124         355             360             365
127 Asn Glu Leu Lys Ser
128     370
131 <210> SEQ ID NO: 2
132 <211> LENGTH: 178
133 <212> TYPE: PRT
134 <213> ORGANISM: Artificial
136 <220> FEATURE:
137 <223> OTHER INFORMATION: Figure 1vhr sequence        same error
139 <400> SEQUENCE: 2
141 Ser Val Gln Asp Leu Asn Asp Leu Leu Ser Asp Gly Ser Gly Cys Tyr
142 1           5               10              15
145 Ser Leu Pro Ser Gln Pro Cys Asn Glu Val Thr Pro Arg Ile Tyr Val
146         20              25              30
149 Gly Asn Ala Ser Val Ala Gln Asp Ile Pro Lys Leu Gln Lys Leu Gly
150         35              40              45
153 Ile Thr His Val Leu Asn Ala Ala Glu Gly Arg Ser Phe Met His Val
154     50              55              60
157 Asn Thr Asn Ala Asn Phe Tyr Lys Asp Ser Gly Ile Thr Tyr Leu Gly
158 65              70              75              80
161 Ile Lys Ala Asn Asp Thr Gln Glu Phe Asn Leu Ser Ala Tyr Phe Glu
162             85              90              95
165 Arg Ala Ala Asp Phe Ile Asp Gln Ala Leu Ala Gln Lys Asn Gly Arg
166             100             105             110
169 Val Leu Val His Cys Arg Glu Gly Tyr Ser Arg Ser Pro Thr Leu Val
170         115             120             125
```

RAW SEQUENCE LISTING   DATE: 01/18/2006
PATENT APPLICATION: US/09/683,264   TIME: 09:46:35

Input Set : A:\018547.ST25.txt
Output Set: N:\CRF4\01182006\I683264.raw

173 Ile Ala Tyr Leu Met Met Arg Gln Lys Met Asp Val Lys Ser Ala Leu
174   130   135   140
177 Ser Ile Val Arg Gln Asn Arg Glu Ile Gly Pro Asn Asp Gly Phe Leu
178 145   150   155   160
181 Ala Gln Leu Cys Gln Leu Asn Asp Arg Leu Ala Lys Glu Gly Lys Leu
182   165   170   175
185 Lys Pro
189 <210> SEQ ID NO: 3
190 <211> LENGTH: 159
191 <212> TYPE: PRT
192 <213> ORGANISM: Artificial
194 <220> FEATURE:
195 <223> OTHER INFORMATION: Figure 1a17 sequence
197 <400> SEQUENCE: 3
199 Pro Pro Ala Asp Gly Ala Leu Lys Arg Ala Glu Glu Leu Lys Thr Gln
200 1   5   10   15
203 Ala Asn Asp Tyr Phe Lys Ala Lys Asp Tyr Glu Asn Ala Ile Lys Phe
204   20   25   30
207 Tyr Ser Gln Ala Ile Glu Leu Asn Pro Ser Asn Ala Ile Tyr Tyr Gly
208   35   40   45
211 Asn Arg Ser Leu Ala Tyr Leu Arg Thr Glu Cys Tyr Gly Tyr Ala Leu
212   50   55   60
215 Gly Asp Ala Thr Arg Ala Ile Glu Leu Asp Lys Lys Tyr Ile Lys Gly
216 65   70   75   80
219 Tyr Tyr Arg Arg Ala Ala Ser Asn Met Ala Leu Gly Lys Phe Arg Ala
220   85   90   95
223 Ala Leu Arg Asp Tyr Glu Thr Val Val Lys Val Lys Pro His Asp Lys
224   100   105   110
227 Asp Ala Lys Met Lys Tyr Gln Glu Cys Asn Lys Ile Val Lys Gln Lys
228   115   120   125
231 Ala Phe Glu Arg Ala Ile Ala Gly Asp Glu His Lys Arg Ser Val Val
232   130   135   140
235 Asp Ser Leu Asp Ile Glu Ser Met Thr Ile Glu Asp Glu Tyr Ser
236 145   150   155
239 <210> SEQ ID NO: 4
240 <211> LENGTH: 235
241 <212> TYPE: PRT
242 <213> ORGANISM: Artificial
244 <220> FEATURE:
245 <223> OTHER INFORMATION: Figure GRAPAHIT2 sequence
247 <400> SEQUENCE: 4
249 Pro Leu Cys Lys Gln Ala Leu Glu Asp Leu Glu Lys Thr Ser Gly His
250 1   5   10   15
253 Asp His Pro Asp Val Ala Thr Met Leu Asn Ile Leu Ala Leu Val Tyr
254   20   25   30
257 Arg Asp Gln Asn Lys Tyr Lys Glu Ala Ala His Leu Leu Asn Asp Ala
258   35   40   45
261 Leu Ala Ile Arg Glu Lys Thr Leu Gly Lys Asp His Pro Ala Val Ala
262   50   55   60

RAW SEQUENCE LISTING   DATE: 01/18/2006
PATENT APPLICATION: US/09/683,264   TIME: 09:46:35

        Input Set : A:\018547.ST25.txt
        Output Set: N:\CRF4\01182006\I683264.raw

265 Ala Thr Leu Asn Asn Leu Ala Val Leu Tyr Gly Lys Arg Gly Lys Tyr
266 65   70   75   80
269 Lys Glu Ala Glu Pro Leu Cys Lys Arg Ala Leu Glu Ile Arg Glu Lys
270   85   90   95
273 Val Leu Gly Lys Phe His Pro Asp Val Ala Lys Gln Leu Ser Asn Leu
274   100   105   110
277 Ala Leu Leu Cys Gln Asn Gln Gly Lys Ala Glu Glu Val Glu Tyr Tyr
278   115   120   125
281 Tyr Arg Arg Ala Leu Glu Ile Tyr Ala Thr Arg Leu Gly Pro Asp Asp
282   130   135   140
285 Pro Asn Val Ala Lys Thr Lys Asn Asn Leu Ala Ser Cys Tyr Leu Lys
286 145   150   155   160
289 Gln Gly Lys Tyr Gln Asp Ala Glu Thr Leu Tyr Lys Glu Ile Leu Thr
290   165   170   175
293 Arg Ala His Glu Lys Glu Phe Gly Ser Val Asn Gly Asp Asn Lys Pro
294   180   185   190
297 Ile Trp Met His Ala Glu Glu Arg Glu Glu Ser Lys Asp Lys Arg Arg
298   195   200   205
301 Asp Ser Ala Pro Tyr Gly Glu Tyr Gly Ser Trp Tyr Lys Ala Cys Lys
302   210   215   220
305 Val Asp Ser Pro Thr Val Asn Thr Thr Leu Arg
306 225   230   235

309 <210> SEQ ID NO: 5
310 <211> LENGTH: 233
311 <212> TYPE: PRT
312 <213> ORGANISM: Artificial
314 <220> FEATURE:
315 <223> OTHER INFORMATION: Figure GRAPAHIT3 sequence
317 <400> SEQUENCE: 5
319 Lys Asp Trp Lys Gly Ala Leu Asp Ala Phe Ser Ala Val Gln Asp Pro
320 1   5   10   15
323 His Ser Arg Ile Cys Phe Asn Ile Gly Cys Met Tyr Thr Ile Leu Lys
324   20   25   30
327 Asn Met Thr Glu Ala Glu Lys Ala Phe Thr Arg Ser Ile Asn Arg Asp
328   35   40   45
331 Lys His Leu Ala Val Ala Tyr Phe Gln Arg Gly Met Leu Tyr Tyr Gln
332   50   55   60
335 Thr Glu Lys Tyr Asp Leu Ala Ile Lys Asp Leu Lys Glu Ala Leu Ile
336 65   70   75   80
339 Gln Leu Arg Gly Asn Gln Leu Ile Asp Tyr Lys Ile Leu Gly Leu Gln
340   85   90   95
343 Phe Lys Leu Phe Ala Cys Glu Val Leu Tyr Asn Ile Ala Phe Met Tyr
344   100   105   110
347 Ala Lys Lys Glu Glu Trp Lys Lys Ala Glu Glu Gln Leu Ala Leu Ala
348   115   120   125
351 Thr Ser Met Lys Ser Glu Pro Arg His Ser Lys Ile Asp Lys Ala Met
352   130   135   140
355 Glu Cys Val Trp Lys Gln Lys Leu Tyr Glu Pro Val Val Ile Pro Val
356 145   150   155   160

RAW SEQUENCE LISTING   DATE: 01/18/2006
PATENT APPLICATION: US/09/683,264   TIME: 09:46:35

Input Set : A:\018547.ST25.txt
Output Set: N:\CRF4\01182006\I683264.raw

```
359 Gly Lys Leu Phe Arg Pro Asn Glu Arg Gln Val Ala Gln Leu Ala Lys
360             165             170             175
363 Lys Asp Tyr Leu Gly Lys Ala Thr Val Val Ala Ser Val Val Asp Gln
364             180             185             190
367 Asp Ser Phe Ser Gly Phe Ala Pro Leu Gln Pro Gln Ala Ala Glu Pro
368             195             200             205
371 Pro Pro Arg Pro Lys Thr Pro Glu Ile Phe Arg Ala Leu Glu Gly Glu
372     210             215             220
375 Ala His Arg Val Leu Phe Gly Phe Val
376 225             230
```

RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 01/18/2006
PATENT APPLICATION: US/09/683,264   TIME: 09:46:36

     Input Set : A:\018547.ST25.txt
     Output Set: N:\CRF4\01182006\I683264.raw

<u>Invalid <213> Response:</u>
Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5

VERIFICATION SUMMARY   DATE: 01/18/2006
PATENT APPLICATION: US/09/683,264   TIME: 09:46:36

Input Set : A:\018547.ST25.txt
Output Set: N:\CRF4\01182006\I683264.raw